



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,073	12/16/2003	Michael C. Swiader	4426-0102P	9011
2292 7590 12/27/2006 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER SHERMAN, STEPHEN G	
			ART UNIT	PAPER NUMBER
			2629	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		12/27/2006	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 12/27/2006.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/736,073	Applicant(s) SWIADER, MICHAEL C.	
	Examiner Stephen G. Sherman	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8 and 10-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8 and 10-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed the 23 October 2006.
Claims 1, 3-8 and 10-20 are pending. Claims 2 and 9 have been cancelled.

Response to Arguments

2. Applicant's arguments filed with respect to claims 1, 3-8 and 10-20 have been fully considered but they are not persuasive.

Applicant argues on page 9 that claim 1 as amended is not anticipated by Holmes, however, the examiner asserts that Holmes does teach the claimed invention as explained in the rejection below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 10, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Holmes (US 6,222,526).

Regarding claim 1, Holmes discloses an ergonomic data input and control device comprising:

a housing having a grip portion being contoured to conform to a grip of a user's hand (Fig. 4 and Fig. 7), said housing further including an upper portion, a central portion and a lower portion (Fig. 4, the device here shows an upper portion at 26, a central portion at 16, and a lower portion at 14);

said upper portion is tapered to extend outwardly with respect to said central portion of the housing (Fig. 4 shows the upper portion tapering outwardly), said upper portion having a surface facing in a direction of the user (Figure 2 shows that while a portion of the housing shown where the number 26 is pointing is tapered, the upper portion where the number 12 is pointing has a direction which is facing the user.);

at least one click button being positioned on a front side of the central portion of the housing (Fig. 1, button 32), wherein said at least one click button is positioned on the front side in a position capable of being manipulated by fingers of the user's hand and a rear side of the central portion is contoured to a palm portion of the user's hand (Fig. 7 shows such an arrangement);

a cursor control device being integrally positioned within the upper portion of the housing (Fig. 8, trackball 40), wherein said control device is positioned within the upper portion of the housing in a position capable of being manipulated by a thumb of the user's hand in a vertical orientation (Fig. 7 shows that the thumb manipulates the control device in a vertical direction.); and

at least one programmable button being mounted on an upper face of the upper portion of the housing (Fig. 8, button 34).

Regarding claims 3 and 4, Holmes discloses the ergonomic data input and control device according to claim 1, wherein the control device is at least one of a trackball, a scroll wheel, and an electrostatic touchpad (Fig. 3, ball 40, see col. 4, lines 51-54, where the cursor control device is a trackball).

Regarding claim 10, Holmes discloses the ergonomic data input and control device according to claim 1, further comprising a power supply for wireless operation (see col. 4, line 65 to col. 5, line 2, where a power supply is inherent in using a radio transmit function in a free space mode of operation).

Regarding claim 15, Holmes discloses the ergonomic data input and control device according to claim 1, further comprising a sensing device integrally formed with said housing for communicating input and control data between the control device and an external host computing device (see col. 4, line 65 to col. 5 line 2, where the radio transmitter is the sensing device).

Regarding claim 17, Holmes discloses the ergonomic data input and control device according to claim 15, wherein said sensing device is an infrared or radio-frequency sensor (see col. 4, line 65 to col. 5 line 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Rosenberg (US 6,693,626).

Regarding claims 5 and 6, Holmes discloses the ergonomic data input and control device according to claims 3 and 4.

Holmes fails to teach a device where the control device is a scroll wheel positioned within and protruding from the upper face of the upper portion of the housing.

Rosenberg discloses an input device where the cursor control device is a scroll wheel positioned within and protruding from the upper face of the upper portion of the housing (Fig. 5, where there is a scroll wheel 158 on the upper face of the upper portion of the housing).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time of the invention to incorporate the scroll wheel of Rosenberg in the device of

Holmes in order to add the known functionality of a scroll wheel, which allows a user to scroll up and down a page on the screen, to the device.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Pejic et al. (US 5,956,018).

Regarding claim 7, Holmes discloses the ergonomic data input and control device according to claim 1.

Holmes fails to teach a pair of click buttons being positioned on the front side of the central portion of the housing.

Pejic et al. disclose an input device comprising a pair of click buttons being positioned on the front side of the central portion of the housing (Fig. 1A, buttons 20, see col. 4, lines 34-36).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time of the invention to incorporate the additional click buttons of Pejic et al. in the device of Holmes in order to have the capability to send more than one input control signal from the central portion of the device.

8. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Rosenberg (US 6,693,626) and further in view of Pejic et al. (US 5,956,018).

Regarding claim 8, Holmes and Rosenberg disclose the ergonomic data input and control device according to claim 6.

Holmes and Rosenberg fail to teach a pair of click buttons being positioned on the front side of the central portion of the housing.

Pejic et al. discloses an input device comprising a pair of click buttons being positioned on the front side of the central portion of the housing (Fig. 1A, buttons 20, see col. 4, lines 34-36).

Therefore, it would have been obvious to “one of ordinary skill” in the art at the time of the invention to incorporate the additional click buttons of Pejic et al. in the device of Holmes in view of Rosenberg, in order to have the capability to send more than one input control signal from the central portion of the device.

Regarding claim 13, Holmes, Rosenberg and Pejic et al. disclose the ergonomic data input and control device according to claim 8.

Holmes also discloses a sensing device integrally formed with said housing for communicating input and control data between the control device and an external host computing device (see col. 4, line 65 to col. 5 line 2, where the radio transmitter is the sensing device).

9. Claims 11, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Robinson et al. (US 6,897,833).

Regarding claims 11 and 19, Holmes discloses a hand-held ergonomic data input and control device comprising:

a housing having a grip portion being contoured to conform to a grip of a user's hand (Fig. 7), said housing further including an upper portion, a central portion and a lower portion (Fig. 4, the device here shows an upper portion at 26, a central portion at 16, and a lower portion at 14),

wherein said upper portion of said housing is tapered to extend outwardly with respect to said central portion of the housing (Fig. 4 shows the upper portion tapering outwardly), said upper portion having a surface facing in a direction of the user (Figure 2 shows that while a portion of the housing shown where the number 26 is pointing is tapered, the upper portion where the number 12 is pointing has a direction which is facing the user.);

at least one click button being positioned on a front side of the central portion of the housing (Fig. 1, button 32), wherein said at least one click button is positioned on the front side in a position capable of being manipulated by fingers of the user's hand and a rear side of the central portion is contoured to a palm portion of the user's hand (Fig. 7 shows such an arrangement);

a control device being integrally positioned within the upper portion of the housing (Fig. 8, trackball 40), wherein said cursor control device is positioned within the upper portion of the housing in a position capable of being manipulated by a thumb of the user's hand in a vertical orientation (Fig. 7 shows that the thumb manipulates the control device in a vertical direction.); and

at least one programmable button being mounted on an upper face of the upper portion of the housing (Fig. 8, button 34).

Holmes fails to teach a base docking station, wherein said base docking station is contoured to receive and integrally fit with the hand-held ergonomic data input and control device; and a lower portion contoured to integrally fit within said base docking station.

Robinson et al. disclose a base docking station (Fig. 1, station 16), wherein said base docking station is contoured to receive and integrally fit with the hand-held data input and control device (Fig. 1, device 14, also see col. 2, lines 59-63) and a lower portion contoured to integrally fit within said base docking station (Fig. 1, where the lower portion of device 14 is contoured to fit the docking station 16).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time of the invention to incorporate the teachings of Robinson et al. in the device of Holmes in order to have a portable base station that can recharge the power supply of a portable input and control device.

Regarding claim 18, Holmes and Robinson et al. disclose the ergonomic data input and control device according to claim 11.

Robinson et al. also disclose a base docking station that further includes at least one of a power supply, and a power supply charging device (see col. 2, lines 59-60, where the base docking station acts a power supply charging device).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Tiphane et al. (US 7, 061,468).

Regarding claim 12, Holmes discloses the ergonomic data input and control device according to claim 1.

Holmes fails to teach a device further comprising a laser pointer.

Tiphane et al. disclose a portable computer input device that further comprises a laser pointer (Fig. 1B, 120, see col. 3, lines 60-62).

Therefore, it would have been obvious to “one of ordinary skill” in the art at the time of the invention to incorporate the laser pointer of Tiphane et al. in the device of Holmes in order to have the capability of pointing to a screen during a presentation.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Rosenberg (US 6,693,626) and in further view of Pejic et al. (US 5,956,018) and Robinson et al. (US 6,897,833).

Regarding claim 14, Holmes, Rosenberg, and Pejic et al. disclose the ergonomic data input and control device according to claim 13.

Holmes, Rosenberg, and Pejic et al. fail to teach the external host computing device including a base docking station, wherein said base docking station is contoured to receive and integrally fit with the lower portion of the housing.

Robinson et al. do teach an external host computing (device (Fig. 1, where the external host computing device can consist of the combination of system 10, station 12, and station 16) including a base docking station (Fig. 1, station 16), wherein said base docking station is contoured to receive and integrally fit with the hand-held data input and control device (Fig. 1, device 14, also see col. 2, lines 59-63) and a lower portion contoured to integrally fit within said base docking station (Fig. 1, where the lower portion of device 14 is contoured to fit the docking station 16).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time of the invention to incorporate the teachings of Robinson et al. in the device of Holmes, Rosenberg and Pejic et al. in order to have a portable base station that can recharge the power supply of a portable input and control device.

12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holmes (US 6,222,526) in view of Young (US 6,419,519).

Regarding claim 16, Holmes discloses the ergonomic data input and control device according to claim 1.

Holmes also discloses a connector (Fig. 5, socket 48) mounted on a bottom, front face of lower portion of the housing (see col. 5, lines 4-10, where a bottom face extends in the perpendicularly in the 'front" direction) and being connected to a wire to communicate input and control data to the external host computing device (see col. 5, lines 4-10).

Holmes fails to teach using a pivoting connector.

Young discloses using a pivoting connector for electrical connectors (Figs. 4-7).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time of the invention to incorporate the teaching of Young in the connector of Holmes in order to have a connector that reduces strain on the wire.

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over (US 6,222,526) in view of Burnett (US 5,615,083).

Regarding claim 20, Holmes discloses the ergonomic data input and control device according to claim 1.

Holmes fails to teach wherein said housing includes a textured grip portion.

Burnett discloses of a data input and control device wherein a housing includes a textured grip portion (Figure 2 shows that the grip portion is textured to fit to a user's fingers.).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the grip portion taught by Burnett with the input device taught by Holmes in order to provide a more comfortable grip portion for a user who is operating the device.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS

15 December 2006

AMR A. AWAD
SUPERVISORY PATENT EXAMINER